UNITED STATES DEPARTMENT OF AGRICULTURE
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To: Dave Davidson, and other members of the
California State Wage Board

From: Julius C. Deubner, Associate Agricultural Economist
Bureau of Agricultural Economics

Subject: Report on Investigation of Vegetable Wage Rates
in the Salinas-Watsonville-Hollister Area --
February 23 to March 4, 1944.

The following pages present the factual data and other pertinent information I gathered on a field trip concerned with the above subject. In order to obtain this information numerous contacts were made with local people, a list of whom is attached. At the same time, an attempt was made to develop and test procedures for gathering similar information in other areas by other investigators. Some of the experience gained has been incorporated in the work of Mr. Metzler on the development of procedures.

The first task undertaken was to determine and set down the 40 or 50 major vegetable operations which are performed in this area. After doing this it was discovered that the various jobs connected with these operations could be easily arranged into large groups and subgroups on the basis of their wage characteristics. It will be found therefore in Tables 1, 2, and 3 that vegetable jobs are grouped, not by crops, but by their method of payment and amount of wages paid. The greater simplicity of this arrangement will be apparent in the tables.

The primary division of the jobs was into two groups - those which were commonly paid for by the hour and those which were commonly paid for on a piece-rate basis. Jobs paid for on both bases were put in each group with a notation showing the approximate percentage of those jobs which were paid for by that method. Hourly jobs were then further divided into unskilled, semi-skilled, and skilled labor. These terms were used for lack of better ones and the different classes actually have little relation to the skills required to do the job. Rather, they were established arbitrarily on the basis of the wages paid per hour in 1943. Unskilled labor was that which secured 65¢ an hour or less; semi-skilled was that which received 70¢ or 75¢; and skilled labor was all labor which received 80¢ an hour and more. Piece-work jobs were further subdivided into those

jobs which were paid on the basis of a unit of product (as 17¢ per lug in tomato picking) and those paid on an acre basis (as in sugar beet thinning).

The data through the column "Type of Worker Generally Used," is probably self-explanatory with the aid of the footnotes. These latter provide qualifying and explanatory information and should be read in connection with the tables. The greatest difficulty was encountered in obtaining information on wage rates in 1941 and 1942. Growers could remember former wage rates but were not exactly sure when they were in effect. In general, however, the rates quoted are thought to be representative and accurate. No figures were entered without satisfactory evidence that they were at least reasonably correct. Whenever possible, payroll records were consulted in order to achieve greater accuracy.

It will be noted in the table that there is a 5¢ an hour differential between preharvest and harvest operations in those crops which are harvested by the hour. This differential has existed since 1933 and was first introduced by the lettuce industry when workers refused to harvest lettuce for 6 or 7 hours when they could thin lettuce or sugar beets for 9 or 10 hours at the same wages. Lettuce is customarily harvested in the early part of the day so that it may be packed and iced on the same day. In order to induce workers to work the shorter day wages were raised 5¢ an hour and this differential has been maintained. From lettuce, the practice of a 5¢ differential for harvesting spread to other crops such as celery, cauliflower, and cabbage. There is some feeling now that this differential is not warranted when workers work a full 9- or 10-hour day. Development of new varieties of wilt-resistant lettuce now allows all-day harvesting. However, since this differential has existed for 11 years and because it is necessary for workers at harvest jobs to keep up a steady pace, especially when mechanical equipment is used, there seems to be no good reason for disturbing this differential.

One of the outstanding tendencies in certain types of vegetable labor in the last two or three years has been the shift from work done on a piece-rate basis to an hour basis. This may largely be attributed to greater use of inexperienced workers who, because of their inexperience, are unable to make good wages when working by the piece. This has been especially true of lettuce and sugar beet thinning. The Mexican Nationals in particular would rather work by the hour than at piece-rates. At the hourly wage of 65¢ which prevailed in 1943 a worker could make $6.50 in a 10-hour day and this was considered satisfactory by many. As pointed out in the footnotes, growers also prefer to have their thinning jobs done by the hour even though it costs more because they get a better job done. Poor thinning may materially reduce yields and quality and may cause later weeding costs to be high.

This shift to hour work in thinning and weeding operations also has an effect on rate of performance. When workers are working individually

under contract they tend to work at their own best speed and are soon scattered out over a field. On the other hand, a crew working by the hour will keep together for each other's company and the fast workers will slow down to the pace of the average or slow workers. Hence, under piece-rate wages the rate of performance may be highly variable, whereas under hour wages it tends to be uniform.

There have been several recent innovations in mechanization and methods of operation in order to lower labor requirements. One of these has been the increased use of chemical sprays for weed control. This is discussed in the footnotes to the tables. Another is the use of segmented seed and mechanical blockers in sugar beets. Segmented seed has been used extensively in Monterey County but the use of mechanical blockers is not widespread. Spinach is now largely cut by machine to eliminate a large part of the hand operations. Mechanical loaders and topping equipment are being utilized in onion harvesting. Mechanical loaders are also becoming more widespread in the harvesting of lettuce. These all have as their immediate purpose the reduction of hand labor costs and requirements. Despite the limitations imposed by the war, the use of mechanical equipment has been given an impetus in the last two years by the labor shortage. In these years the need for performing more work with less labor has been the principal motivating force rather than the reduction of costs.

Certain jobs in the Salinas area have customarily been filled by a particular type of worker, such as white workers for shed labor, Filipinos and Mexicans for stoop labor, Italians for artichokes, and family labor for moderately easy harvest activities such as tomato picking, onion topping, etc. In general, these same relationships have tended to be maintained during the war years but with the addition of two new and distinct types of workers. These are the Mexican Nationals and the volunteer workers who are not normally part of the farm labor supply. The latter have been used principally in the harvest crops such as strawberry picking and tomato picking where family labor has been the rule. These consist largely of school children, townspeople, and, in the Monterey area, Army wives. Their addition to the labor force has caused little or no rivalry among established groups. Their average rate of performance is low and the turnover in workers is large. They constitute a reserve force which is utilized by growers when regular sources fail. In this capacity they have played an important function.

The introduction of the Mexican Nationals into the stoop labor field, formerly controlled exclusively by Filipinos and local Mexicans, has however caused some disturbance. If it were not for the fact that all workers can find employment and are making good wages, this disturbance might be serious. Local workers object that Mexican Nationals receive free hospitalization, a guaranteed number of days work, and board paid on those days when they are willing to work but no work is provided. Local workers receive none of these considerations, and, in

their opinion, do better work than the Nationals. They propose, as an equalizing remedy, the payment of a bonus to local workers at the end of the season. Presumably this type of remuneration is preferred to higher wages because the Nationals also will share in higher wages and the inequality will still exist.

There is little doubt but that the addition of the Nationals to the local labor supply has served to keep wages stabilized in the Monterey area. Without them, some growers would be short of help and there would be a tendency toward pirating of workers and wage raises. As an economic measure to help curb inflation, the bringing in of Mexican Nationals has probably been justified. Their use, however, should be regarded in that light and not as a means to hold wages down and thereby increase profits to the growers. If wages are held down through government measures, either direct or indirect, some sort of simultaneous price control seems justified.

The question of comparative wage rates between areas will inevitably be introduced at a hearing on wage ceilings. In Monterey County it is generally conceded by growers that they are enjoying relatively low basic wages as compared with other California vegetable areas, with the exception of Imperial and other Southern California Counties where more Mexican labor is available. This is in spite of the fact that until recently wages in this area have tended to be higher than in competing areas. The present situation is attributed by the growers to the unofficial wage stabilization measures which they themselves have adopted. In 1943 the Farm Labor Committee of the Monterey County War Board published prevailing rates of pay for the principal vegetable crops in Monterey County. The majority of growers, and especially the larger ones, adhered to these rates to such an extent that little pirating was done and workers were less successful in bidding up wages. Exceptions to these rates were largely made by the smaller growers, the reasons for which will be discussed later. A copy of the published rates for 1943 is attached.

Another reason given for a lower prevailing wage scale in Monterey County is that the year-round characteristics of lettuce thinning and harvesting provide more working days for laborers who are thus able to earn higher yearly earnings despite the lower wage scale. Growers say, however, that workers are often attracted away by the prospect of higher hourly wages even though the work will last for only a few weeks and their total earnings over a given period are less.

In this investigation of vegetable wages, little attention was devoted to wages in fruit activities. The reason is that the fruit industry in Santa Cruz, Santa Clara, and San Benito Counties largely draws its labor from a different class of worker and is worthy of a separate study in itself. Thinning and pruning operations are performed usually by white workers who have developed a certain amount

of skill in that field. These workers are now being paid from $0.85 to $1.00 an hour as compared to 65¢ an hour for weeding and thinning vegetables. Inexperienced pruners and thinners can do great harm to an orchard and many growers would prefer to have their trees untouched rather then entrust them to inexperienced workers.

Near Hollister some thinning was done last year by Filipino workers. They were paid 70¢ an hour when their usual field wage was 65¢. They demanded the 5¢ differential because they did not like the work on the ladders.

Fruit harvesting is frequently performed by family labor and volunteers. Speed in harvesting the crop is essential for most fruits and a large labor force is needed for a short period of time. For this reason, sufficient regular fruit workers may not always be available and volunteers have helped a great deal in the past. At harvest time fruit activities may compete successfully with vegetables for workers. Because fruit growers are often small operators, because present prices are good, and because their product is highly perishable, there has been a much greater tendency to raise wages and pirate workers than in the vegetable industry. Opportunities for real voluntary wage control are limited and have not been successful. It is suggested that a study be made of the fruit industry in Santa Clara, San Benito, and Santa Cruz Counties and that if wage hearings are held for both fruits and vegetables that they be held separately.

Past experience has shown that the smaller growers have been at a disadvantage in obtaining workers when labor supplies are short and hence they have been the first to raise wages in order to attract workers. They have been disadvantaged because, in most cases, they are unable to provide as long employment or as good housing accommodations as the larger growers and the only alternative they have is to compete on the basis of wages. It appears, therefore, that a flat ceiling on wages may disadvantage the small grower still more by nullifying his one competitive weapon. This is a problem which the Wage Board should consider carefully before ceilings are determined.

Subsequent to the beginning of the investigation into vegetable wage rates in the Salinas-Hollister-Watsonville area there has been a change in the attitude of growers toward the immediate need for wage stabilization measures. A hearing was originally requested by them when it was felt that the labor supply might be short and that the prevailing rates might be raised by pirating and the bidding up of wages by workers. Since that time, however, approximately 1,200 Mexican Nationals have entered the area and the labor situation has apparently been stabilized for the present. Consequently, growers are not as anxious to proceed with wage ceiling hearings as they were six weeks ago.

In the original outline of procedures it was felt that it would be desirable to have some kind of comparison between prices received by the grower and wages paid to workers. In spite of the argument that many factors besides the price of his product enter into the consideration of a grower's ability to pay a given amount of wages, the fact remains that the price the grower receives is the principal factor. For this reason, and because the question of the value of the product will inevitably be raised at any hearing on wage stabilization, an attempt was made to gather some data on prices. This is extremely difficult to do in the vegetable industry since prices frequently fluctuate greatly during any one season. The factors of supply and demand operate very quickly in determining prices since most vegetables are relatively perishable and the situation at the moment determines prices. Prices are generally high early in the season when supplies are low and tend to decrease as the crop becomes more abundant. If sufficient time and data were available it would be possible to compute a seasonal weighted average price on the basis of shipments and actual prices during the season. Because of lack of time no attempt was made to do this.

However, prices to the grower were available for sugar beets for 1944 and the three previous years. These can be used to illustrate the manner in which prices may be compared with wages. For example, in 1941 the price of sugar beets was $8.50 when the going wage for thinning sugar beets was 40¢ per hour or $3.60 for a nine-hour day. It took therefore the gross receipts from the sale of .42 tons of sugar beets to pay for one day's work in 1941. In 1942, the price was $10.50, and a day's pay was $4.95, so it took .47 tons of beets to pay for a day's work. From this it may be presumed that the grower was at a disadvantage as compared with 1941 since it took more of his product to pay for the same amount of work. In 1943 the cost to the grower of a day's work dropped to .41 tons and with the expected prices and wages of 1944 it would drop still further to .39 tons.

One valid criticism of this method of comparison between prices and hourly earnings is that it does not measure the relative efficiency of the average worker between different years, especially since there is good reason to believe that his efficiency has dropped since 1941. However, if the comparison is made between the price of a product and the wages paid to have an operation performed on a piece-work basis, the efficiency of the worker does not enter into the comparison. For example, in 1941, when sugar beets sold at $8.50 per ton, the average contract price for thinning an acre of beets was $9.00. It took, therefore, 1.06 tons of sugar beets to have an acre thinned. In 1942, with prices of sugar beets at $10.50 per ton and cost of thinning at $12.00 per acre, it cost the grower 1.14 tons of beets. In 1943 it cost .97 tons and in 1944 this figure will approximate 1.00 tons. It would seem that figures such as these provide to a certain extent an index of the grower's ability to pay as compared with other years.

Conclusions and Recommendations:

The present sufficiency of labor in the Salinas area and the general stability of field labor wages indicate that the wage situation may remain relatively quiet until August. At that time the sugar beet harvest will begin as will fruit harvesting in adjacent counties, putting a pressure on these crops to secure labor from competitive crops which are already utilizing the labor. Three weeks ago the prospects were for a good apricot yield which would require many workers in a short period of time. Work now being done by the California Extension Service Farm Labor Office will show more accurately the extent and seasonality of the overall requirements in 1944. These estimates will be available in April.

In my opinion the State Wage Board should not proceed with the issuance of wage ceiling orders as long as the present wage level is maintained. It should be prepared, however, for the situation which may develop in August. In order to commit itself to a definite line of action, the Board might announce a hearing for the latter part of July and at that time re-examine the situation and determine the necessity for issuing wage ceilings. In the meantime, further investigational work should proceed in both the vegetable and fruit industries in that area. The new draft policy toward agricultural labor may disturb the present favorable supply-demand balance and hasten the need for stabilization.

The two principal reasons for not issuing ceiling orders at the present time are these:

1. If the general scale of wages were increased, the result would be an inflationary action which is contrary to the spirit and intent of wage stabilization. The basic wage for common field labor is now 65¢ an hour. If this is raised to 70¢ or 75¢, wages in all higher skilled agricultural jobs must also be raised in order to maintain customary differentials.

2. If the ceilings were set at the present level, the Board would be placing a ceiling on the Salinas area which would be lower than the prevailing wages in most other California areas. This might result in an outflow of workers to other areas with a consequent hardship on growers, or it might bring upon the Board, from labor circles, the accusation that it is attempting to reduce all agricultural wages.

If, however, the Board does issue wage ceiling orders in the near future, it is recommended that ceilings be placed on a number of activities in the area at the same time. Some of the jobs and activities which should be covered are these:

1. Hourly rates of pay for common field labor.

2. Hourly rates of pay for irrigators and harvest field labor.

3. Piece rates for -

   a. Carrot bunching and tying.
   b. Snapping and clipping carrot tops.
   c. Onion topping.
   d. Garlic topping.
   e. Tomato picking.
   f. Broccoli harvest.
   g. Sugar beet topping and loading.
   h. Lettuce thinning (by contract).
   i. Sugar beet thinning (by contract).
   j. Fruit picking (various fruits).

4. Whenever an hourly rate is set for an activity, a corresponding piece rate should be set in order to prevent evasion of the ceiling order. In some cases where a piece rate is not commonly used and where it is difficult to determine piece-rate wages, it may be necessary to prohibit payment on a piece-rate basis.

The following are some additional questions which may be raised at a public hearing and which should be considered by the Wage Board:

1. Should both a maximum and a minimum rate be placed on wages? (This question was raised by members of the Monterey County Farm Production Committee. It was felt that when only a maximum rate was published, the fact that wages could be below this was largely overlooked.)

2. If ceilings are set for piece-rate jobs, should provisions be made for adjustments when fields are weedy, have poor yields, or other poor working conditions?

3. Should there be an allowance for travelling time? In 1943 the following conditions were set by the growers and applied to field workers only:

   a. Up to 15 miles - No travel time allowed.
   b. 15 to 25 miles - One-half hour travel time allowed (one way only).
   c. 25 miles and over - One hour travel time allowed (one way only).

4. Should perquisites be given a value as part of wages? If so, what is their value; i.e. house and garden; room and board, etc.? What is the Bureau of Internal Revenue policy in regard to this?

5. Should the wages, as set, be net to the worker, or gross to the grower?

6. What provisions can be made to prevent chiselling? Examples:

   a. Paying for more travelling time than was actually performed.

   b. Paying the prevailing rate but adding an hour or two daily to the worker's pay.

7. Should some differential be allowed to the small grower in order to enable him to compete more effectively with the large grower?

Table 1.- Hourly rates of pay for agricultural workers - Vegetable Crops
Salinas-Watsonville-Hollister Area

JOB	Usual Number Hours Worked 1/	BASIC HOURLY WAGE 1941	1942	1943 2/	Tentative 1944	Perquisites commonly provided free by grower a/	Cost of Perquisites to grower 3/	DAILY EARNINGS (9-hour day) 1941	1942	1943	Tentative 1944	Type of worker generally used b/ 4/
Unskilled field labor (Stoop)												
A. Thinning -												
(Lettuce, sugar beets 6/, cabbage -shipping, cabbage - for dehydration, broccoli, radish seed, other seed crops, miscl. vegetable crops)	8-10	.40	.45-.55	.60-.65	.65	H.&T.	6-10%	$3.60	$4.95	$5.85	$5.85	F., M.& M.N.5/
B. Weeding, hoeing -												
(Lettuce, sugar beets, dry beans, onions 7/, carrots- market & dehyd., tomatoes, cabbage -shipping & dehyd., broccoli, spinach, garlic, guayule, misc. veg. & field crops)	8-10	.40	.45-.55	.60-.65	.65	H.&T.	6-10%	$3.60	$4.95	$5.85	$5.85	F., M.& M.N.
C. Harvesting -		.40	.45-.55	.60-.65	.65							
1. Sugar beets - top and load 8/	9-10	.40	.45-.55	.60-.65	.65	H.&T.	6-10%	$3.60	$4.95	$5.85	$5.85	F., M.& M.N.
2. Tomatoes	5-10	.40	.45-.55	.60-.65	.65	T.		$3.60	$4.95	$5.85	$5.85	Fam.
3. Strawberries	5-10	.40	.45-.55	.60-.65	.65	T.		$3.60	$4.95	$5.85	$5.85	Fam.
4. Onions & garlic	5-10	.40	.45-.55	.60-.65	.65	T.		$3.60	$4.95	$5.85	$5.85	Fam.
D. Misc. field jobs		.40	.45-.55	.60-.65	.65	H.&T.	6-10%	$3.60	$4.95	$5.85	$5.85	
1. Windrowing (onions & garlic)	8-10	.40	.45-.55	.60-.65	.65	H.&T.	6-10%	$3.60	$4.95	$5.85	$5.85	F. & M.
2. Clean-up of fields	8-10	.40	.45-.55	.60-.65	.65	H.&T.	6-10%	$3.60	$4.95	$5.85	$5.85	F. & M.
3. Checking	8-10	.40	.45-.55	.60-.65	.65	H.&T.	6-10%	$3.60	$4.95	$5.85	$5.85	F. & M.
4. Grading and sacking	8-10	.40	.45-.55	.60-.65	.65	H.&T.	6-10%	$3.60	$4.95	$5.85	$5.85	W., Women
5. Transplanting 9/	8-10	.40	.45-.55	.60-.65	.65	H.&T.	6-10%	$3.60	$4.95	$5.85	$5.85	Fam.
6. Misc. field work 10/	8-10											

a/ H. - Housing; T. - Transportation; C. - Campsite; G. - Garden.
b/ F. - Filipinos; M. - Local Mexicans; M.N. - Mexican Nationals; Fam. - Family; W. - White men workers.

Footnotes to Table 1

1. Usual number hours worked per day. For thinning and weeding operations the usual number of hours worked per day will vary from eight in the winter to ten in the summer. A year-long average working day will probably be about nine hours. Harvesting of certain crops, such as lettuce and celery, is commonly done for only 6 or 7 hours in order that the product may be packed and iced on the same day.

   When work is paid for on a piece-rate basis, the number of hours worked per day tends to be more erratic, especially when family labor is involved. Some members of the family may work 10 or 12 hours while women and children may work only 4 or 5 hours. Shed workers commonly work 8 hours from 8 a.m. to 5 p.m., and field labor often follows these same hours.

2. Except for skilled labor, where two wages indicate a range, the first rate given in a particular year is the rate at the beginning of the season; the second rate is the one prevailing at the end of the season.

3. Provision of housing and transportation by the grower for Filipinos, Mexicans, and Mexican Nationals is customary in this area. The great majority of the workers are hired through labor contractors who are usually Filipinos. If the contractor provides the housing and transportation for the workers, the growers will reimburse the contractor by paying him 3 percent of the payroll for each of the services, or a total of 6 percent of the payroll. If the grower provides these directly to the worker he does not reimburse the contractor.

   The contractor also provides board for the workers which the worker pays from his salary. The customary rate of payment for board prior to 1943 was the pay from two hours' work. (If the hourly rate of pay was $0.55, the charge for daily board was $1.10.) However, in 1943 the workers objected to paying higher rates for board despite costs to the contractor being greater. In order to enable the contractor to keep board costs down and to keep the workers satisfied, some growers in 1943 agreed to pay the cook's wages and to bear the cost of utilities. An additional 3 percent of the payroll was paid to the contractor for a cook and 1 percent for utilities. Thus the costs of perquisites to the grower, if these are provided by the contractor, may range from 6 to 10 percent of the payroll, depending upon the particular case. Some growers provide these perquisites directly but most would rather dispense with this responsibility by paying the contractor. The

contractor's duties also include keeping the camp in order and getting the crews out into the field. If he works in the field as a foreman he also receives $0.90 per hour.

Examples of costs to the grower when the contractor provides:

Housing	-	3 percent of the payroll
Transportation	-	3 percent of the payroll
Total		6 percent of the payroll

In some cases the grower pays for:

Cook	-	3 percent of the payroll
Utilities	-	1 percent of the payroll
Total		10 percent of the payroll

4. Type of worker generally used. Filipinos, local Mexicans, and Mexican Nationals are the preferred type for stoop labor in the vegetable crops. They are usually single and crews live together in camps provided by the contractor or the grower. They are accustomed to working a full 9- or 10-hour day.

Family workers may be white, or Mexican or Filipino, and include women and children. They are commonly used on lighter tasks, especially in harvest activities such as onion topping, carrot bunching, tomato picking, etc. They are usually paid on a piece-rate basis where they can work at their own pace. Their hours are frequently not regular and they may work from 3 to 10 hours, depending upon their individual taste.

In artichoke harvest and packing, the workers are commonly men of Italian descent.

5. In addition to their regular wages at the prevailing wage, Mexican Nationals are guaranteed work on at least 75 percent of the working days during the season they are employed. The growers must also pay for their board on any working day on which they are not employed but are willing to work. The board rate is $1.50 per man per day. This is higher than the Filipinos pay for board because the Mexican Nationals want special food prepared by their own cooks.

6. In 1943 eighty-five percent of the thinning work in sugar beets was done by the hour. The Spreckles Company estimated that the average cost of thinning sugar beets in 1943 was $22.50 per acre, combining both contract and hourly jobs. Contract jobs were done as low as $12.00 and costs on an hour basis went as high as $40.00 per acre. Growers prefer an hourly job because the work is done better.

7. In the past two years there has been a considerable increase in the use of chemical sprays for weed control of several crops, notably onions, garlic, celery, and carrots. This innovation has materially reduced the labor requirement for weeding. The field is sprayed with Sinox solution or ordinary stove oil when the plants are very young and the weeds are killed with only small damage to the crop. Chemical spraying is not successful on all crops. In 1943 approximately 90 percent of the onions in Monterey County were sprayed.

   Spraying for weed control has reduced first weeding costs on onions from $60.00 and over to a low of $10.00. After spraying, a man can weed from one-half to three-fourths acres per day on the first weeding as compared to one-eighth acre or less without spraying.

   Comparison of labor requirements -

	Hours Required Per Acre		
	Weeding	Hoeing	Total
Without Sinox (average)	75	10	85
With Sinox	10	10	20

8. Very few sugar beets are topped and loaded by the hour. Mexican Nationals sometimes prefer this work by the hour, especially on the low yield fields.

9. Transplanting of celery, cauliflower, guayule, tomatoes, etc.

10. This category includes all field work not otherwise specified and in which no particular skill is required. It is usually performed by Filipinos, Mexicans, Mexican Nationals, or women.

Table 2.- Hourly rates of pay for agricultural workers - Vegetable Crops
Salinas-Watsonville-Hollister Area

JOB	Usual Number Hours Worked	BASIC HOURLY WAGE 1941	1942	1943	Tentative 1944	Perquisites commonly provided free by grower a/	Cost of Perquisites to grower	DAILY EARNINGS (9-hour day) 1941	1942	1943	Tentative 1944	Type of worker generally used b/
Semi-skilled labor												
A. Irrigating	11-12											
1. Southern Monterey County	11-12	.40	.45-.55	.60-.65	.65	H.&T.		$4.80	$6.60	$7.80	1/ $7.80	F. & M.
2. Vegetable area	11-12	.45	.50-.60	.65-.70	.70	H.&T.		5.40	7.20	8.40	1/ 8.40	F. & M.
3. Night work 1/	11-12	.50	.55-.65	.70-.75	.75	H.&T.		6.00	7.80	9.00	1/ 9.00	F. & M.
B. Harvesting of certain crops												
1. Lettuce	6-9	.45	.50-.60	.65-.70	.70	H.&T.	6-10%	4.05	5.40	6.30	6.30	F.,M.& M.N.
2. Celery 2/	6-9	.45	.50-.60	.65-.70	.70	H.&T.	6-10%	4.05	5.40	6.30	6.30	F.,M.& M.N.
3. Broccoli	8-10	.45	.50-.60	.65-.70	.70	H.&T.	6-10%	4.05	5.40	6.30	6.30	F.,M.& M.N.
4. Cauliflower	8-10	.45	.50-.60	.65-.70	.70	H.&T.	6-10%	4.05	5.40	6.30	6.30	F.,M.& M.N.
5. Cabbage - Market	8-10	.45	.50-.60	.65-.70	.70	H.&T.	6-10%	4.05	5.40	6.30	6.30	F.,M.& M.N.
6. Artichokes 3/	8-10			.70-.75	.75	T.				6.75	6.75	W.
Skilled labor 4/				Range								
1. Tractor drivers, no house	8-10			.80-.90		None				7.65		W.
2. Tractor drivers, house prov.	8-10			.70-.85		H.&G.	$20-$50 p.mo.			6.75		W.
3. Tractor drivers, heavy equip.	8-10			1.00- up		None	-			9.00-up		W.
4. Truck drivers, 5/ no house	8-10			.75-1.00		None	-			7.65		F.,M.& W.
5. Truck drivers, house prov.	8-10			.70-.85		H.&G.	$20-$50 p.mo.			6.75		F.,M.& W.
6. Bean harvesters, combine	10-12			1.00-1.25		H.				$10-$12		W.
7. Sack sewing 6/	8-10			.75-1.00						7.65		M., Women
8. Loading, boxes, crates, etc. 7/	8-10			.75-1.00		H.&T.	6-10%					F. & M.
9. Crew foreman			.75-.80	.85-.90		H.&T.	6-10%					F. & M.

a/ H.- Housing; T.- Transportation; C.- Campsite; G.- Garden.
b/ F.- Filipinos; M.- Local Mexicans; M.N. - Mexican Nationals; Fam. - Family; W. - White men workers.

Footnotes to Table 2

1. On the basis of a twelve-hour work day. Night work usually receives the day rate per hour plus 5¢.

2. Celery is packed in half-crates, holding from 1-1/2 to 6 dozen head of celery.

3. On artichokes all picking and packing work is paid for by the hour. Field workers in artichokes are commonly Italians who received $0.75 per hour in 1943. Some local Filipinos, Mexicans, and Mexican Nationals also worked at unskilled jobs at $0.65 per hour. Tractor drivers received $0.85 per hour in 1943. Workers on similar jobs receive the same wages regardless of where they live. Those who live on the ranches are provided simple housing and pay for the meals they receive.

   Workers usually pick in the morning hours and the same workers spend the afternoon sorting, grading, packing, and boxing the artichokes. Packing is done on the ranches and the boxes are then brought to a central shed where they are loaded on freight cars.

   It is claimed that 10,000 boxes of artichokes were lost last year because of labor shortages. Another complaint is that it is now difficult to get workers to work on Sundays and Mondays.

4. It has been estimated that in the northern part of the Salinas Valley about 25 percent of the farms provide their year-round help, such as tractor drivers, with houses; and that almost all of them provide housing in the southern part. If housing is not available on the ranch, growers will sometimes rent a house in town for the man. The extent to which they will do this depends upon the man and upon how anxious they are to keep him.

   Skilled year-round labor is often paid for on a monthly basis. For example, tractor drivers in 1943 were commonly paid $140 - $160 with a house provided or with room and board provided for a single man.

5. The Spiegl Company paid union truck drivers $1.00 an hour when they lived in town. Drivers were paid from the time they left

the plant until they came back. Tractor drivers were paid $0.85 an hour plus a house and utilities. When they were not driving tractors they were often given odd jobs such as painting, fence repairing, etc., at the same wages.

6. Onions and garlic are the principal vegetable crops which are sacked. Grading and sacking of onions, and sack-sewing, was formerly done in the fields. Now there is a tendency to do more of this work in sheds where mechanical equipment is available. These sheds may be movable. Graders usually get the same rate as unskilled field workers although $0.70 an hour was not uncommon in 1943. One source reported that for many years sack-sewers received $0.10 more per hour than common labor. However, last season H. P. Garin paid sack-sewers at the rate of $1.00 per hour. Shed workers usually work an 8-hour day, from 8:00 a.m. to 5:00 p.m. with one hour off for lunch.

7. Loading. In carrots, a good Mexican loader can load 50 net tons in a ten-hour day, or 5 tons per hour. The gross weight of each crate is from 105 to 135 lbs. The Spiegl Company found that men were making as much as $1.50 per hour on a piece-work basis. These wages were considerably out of line with other workers. They then started to pay their loaders an hourly wage of $1.00 which was satisfactory to the men. Some growers paid only common labor wages of $0.65 per hour. The range probably depended upon the amount of work that was to be done and the average number of boxes loaded per hour.

Wages for loading of boxes and crates onto trucks has also shifted to an hour basis on these farms where mechanical loaders have been introduced. Piece rates became impractical with mechanical loaders because the crates were emptied onto a movable belt in the field and there was no easy way to check the number of crates loaded.

Table 3.- Piece rates of pay for agricultural workers - Vegetable Crops
Salinas-Watsonville-Hollister Area

JOB	Usual Number Hours Worked	BASIC RATE OF PAY'T PER UNIT 1941	1942	1943	Tentative 1944	Unit	RATE OF PERFORMANCE 1/ Usual	Good	DAILY EARNINGS (Average Workers) 1941	1942	1943	1944	Perquisites a/	Cost of Perq. to grower	Type of worker usually used b/
Carrot harvest - market						3 doz.									
1. Bunching and tieing	6-10	.18	.18-.20	2/&3/	.21	.21	field 4/	35	50	$6.30	$7.00	$7.35	$7.35	T.C.		Fam.
2. Loading crates	8-10			5/	.01	.01	crate								6-10%	F.& M.
Carrot harvest - dehydration		Not														
1. Snapping tops 6/	6-10	done	.18	7/	.18	.18	90#	5 per hr.	7 per hr.	-	8.10	8.10	8.10	T.C.		Fam.
2. Clipping tops 6/	6-10	prior					field	4½ per hr.	6½ per hr.	-	8.10	8.10	8.10	T.C.		Fam.
3. Loading crates	8-10	to 1942					crate 6/	50 per hr.	75 per hr.	-	9.00	9.00		H&T	6-10%	F.& M.
Onion harvest																
1. Topping	6-10				.35		100# sack	2 per hr.	2½ per hr.			7.88		TC		Fam.
Garlic harvest																
1. Windrowing	8-10						55#									
2. Topping	6-10	.15	.20	9/	.25		hamper	3 per hr.	4 per hr.	4.05	5.40	6.75		T.C.		Fam.
Tomato harvest 10/	6-10	.10	.11-.15	11/	.17		50# lug	50	70	5.00	7.50	8.50		T.C.		Fam.
Cabbage harvest - market	9-10			12/	3.00		Ton	2½	4			7.50		H.&T.	6-10%	F.,M.&M.N.
Broccoli harvest 13/	9-10	.16	.16-.20		.20	.20	40-50# field crate	4½ per hr.	7 per hr.	6.48	8.10	8.10		H.&T.	6-10%	F.,M.&M.N.
Spinach harvest 14/	9-10			15/	.30		40# crate								6-10%	F.,M.&M.N.
Strawberries 16/																
1. Prune					1.00		Bed									
2. Harvest	6-10				.50		Crate	1½ per hr.	2 per hr.			6.75		T.C.		Fam.
Sugar beets harvest 17/	9-10		Gov.scale	Gov.scale 10%			Ton	(See Page 30)						T.C.		Fam.
Contract jobs																
Lettuce thinning 18/	9-10					18.	Acre	.4	.6				7.20	H.&T.		F.,M.&M.N.
Sugar beet thinning 19/	9-10	9.00	12.00	20/	14.	15.	Acre	.5	.8	4.50	6.00	7.00	7.50	H.&T.		F.,M.&M.N.
Onion Windrowing	9-10				27.		Acre	.33	.4			9.00		H.&T.		F.,M.&M.N.

a/ Perquisites commonly provided free by grower. H - Housing; T - Transportation; C - Campsite; G - Garden.
b/ F - Filipinos; M - Local Mexicans; M.N. - Mexican Nationals; Fam. - Family; W. - White men workers.

Footnotes to Table 3

1. "Usual" rate of performance is the amount of work done by an average worker of the class of worker usually employed. The "good rate is that performed by an experienced, above-average worker. However, it is not the best as some exceptional workers can exceed "good" performance. Daily rates of performance are based on a 9-hour day.

2. In 1943 the contractor received 48¢ per packed crate, of which 42¢ went to the worker. From the bonus of 6¢ the contractor paid the salaries of the checkers, row bosses, and loaders, thus relieving the grower of this responsibility. The contractor netted approximately 1¢ per packed crate from this bonus. In addition, if he worked in the field as foreman, he received 90¢ per hour. If the loaders were paid directly by the grower, the contractor received a bonus of only 4½¢ per packed crate. The rate to the worker of 21¢ per field crate was published and adhered to by all carrot growers.

3. Workers purchase own "twistems" at 32¢ per 1000.

4. 3 dozen bunches = 1 field crate
6 dozen bunches = 1 packed crate
2 field crates = 1 packed crate

5. Loading is frequently paid for on an hourly basis. See footnote 7 of table 2.

6. "Snapping" carrot tops is to break off the tops by twisting them with the hands. In "clipping", a pair of shears is used and the tops are cut or clipped off.

7. The rates for snapping or clipping carrot tops for dehydration, as originally set, were intended to apply to the Imperator variety of carrots. However, in 1943 most growers grew the heavier, larger, higher yielding Red Core Chantenay variety and workers were able to fill the crates faster. The original rates were maintained however and as a result earnings were considerably out of line with other activities. Even inexperienced workers were making from $1.00 to $1.25 an hour snapping dehydrating carrots.

   This problem however has solved itself. It is expected that no carrots will be dehydrated in Monterey County in 1944. Some carrots will be grown for dehydration but these will be largely of the Imperator variety and will be shipped out of the county.

8. Ninety pounds is the standard net weight for field crates but they are often packed to 115 lbs. The crate itself weighs about 14 lbs. Two canner's lugs (net weight of 45 - 50 lbs.) equal one field crate.

9. The workers received this amount. In addition, the growers in 1943 paid the contractor 25¢ per 100 lbs. This amount was intended to cover the wages of a checker and a loader, supervision, and to cover any transportation which was necessary.

10. A field of tomatoes is picked over from 4 to 5 times. The first and last pickings give only fair yields and the middle ones are considered the best pickings. Picking is usually done on a piece-rate basis and concessions to the workers may be made if the picking conditions are not good. When yields are very poor, picking may be paid for by the hour.

11. If the work of picking tomatoes was done by a crew operating under a contractor and if he furnished a loader, the contractor was paid 3¢ per lug. This was roughly divided as follows: For loading, 1½¢; for the contractor, 1½¢ for obtaining and keeping workers. If he acted as foreman he received the regular wage of 90¢ per hour.

12. This is considered a high rate and is attributed to wet conditions under which the workers must work most of the time. Comparable rate in the Imperial Valley is $1.50 per ton.

13. Broccoli workers are maintained as crews for most of the year and tend to make better than average wages. They are mostly Filipinos although some Mexican Nationals have been used. Yearly earnings for Filipinos go as high as $2900 and average over $2000. Mexican Nationals receive between $1,000 and $1,200 for a season's work of from 6 to 8 months.

14. Spinach harvest. Growers usually sell a spinach crop to the cannery in the field and the cannery takes the responsibility of harvesting it. In 1943 the Raiter Cannery had all its spinach done by contract at a rate of $16.00 per acre. The contractor paid his workers a piece rate by the crate.

In 1944 practically all of the spinach will be cut by machine under direct supervision of the cannery. The tractor driver and machine operator each receive $1.00 per hour and 3 men from the cannery shed are put out in the field to distribute and load boxes. These receive their regular shed wages of 85¢ per hour. That part of the crop which is harvested by hand will probably be done by contract as in 1943.

15. In San Benito County.

16. Strawberries. The largest and principal strawberry grower in Monterey County is E. P. Driscoll. Practically all of his strawberry land is share-cropped and the tenants take care of wages to thinners and pickers. These seasonal laborers are largely

Mexicans and white family labor. Truck drivers receive 70¢ per hour.

Thinning is done both by the hour, at 65¢ and 70¢, and by the row, on a piece-work basis at $1.00 per row.

The usual wage for picking strawberries in 1943 was 50¢ per crate, going as high as $1.00 per crate in off-season and low yield crops and as low as 35¢ when picking conditions were very good.

17. In 1943 a great deal of the topping and loading of sugar beets in Monterey County was done by Mexican Nationals who were paid the prevailing wage (government scale plus 10 percent). When exceptions were made to this prevailing wage it was usually to local experienced Filipinos and Mexicans who would not work in the lower yield fields except at a bonus of more than 10 percent of the scale.

18. Conditions usually imposed when lettuce is thinned by contract; 12-14" spacing; 100 percent single plants; all weeds removed in the row to a strip of 2" on each side of the plants, or to a distance at which a cultivator can work. The basic contract rates quoted assume normal weed and soil conditions, i.e. reasonably clean from weeds and fairly smooth soil.

19. Conditions usually imposed when sugar beets are thinned by contract; 10-12" spacing; 10-15 percent doubles is considered satisfactory and allowable; weed-free to cultivator zone. Basic contract rates assume normal weed and soil conditions as well as standard width beds. Standard beds are usually 40" from center to center and contain two rows. Apparently little or no distinction has been made in thinning rates when segmented seed has been used. Adjustments in rates should be made if closer spacing is desired by the grower.

In 1943 approximately 15 percent of the sugar beet thinning was done by contract. Four or five years ago, this percentage was 45 percent. Employers attribute this to the fact that a man can now make a fairly good daily wage at hourly rates and can work more leisurely. Hence most workers prefer to work by the hour.

An additional reason is that growers also prefer to have their thinning done by the hour despite the fact that it usually costs more. They get a better job done because work done under contract tends to be weedier, and to have more doubles. This may decrease the ultimate yields and increase the costs of weeding and hoeing at later dates.

20. Rates quoted are net to the worker. The contractor is also given an allowance per acre. In 1943 when the basic rate was approximately $14.00 the contractor received $1.00 per acre for maintaining his crew.

Contacts made - February 23 - March 4, 1944

A. A. Tavernetti, County Agent, Monterey County

Tom Thwaits, Assistant County Agent, Monterey County

Joe Wing, Secretary, Monterey County Farm Bureau (tomato and carrot grower)

Mr. Christiersen, Chairman, Monterey County Farm Production Committee (carrot grower)

Jack Bias, Secretary, Grower-Shipper Association, Salinas

T. R. Merrill - Grower-Shipper (lettuce, celery, onions)

Bill Paulsen, Agricultural Supt., Spreckles Sugar Company (sugar beets)

Fred Taylor, Farm Placement Manager, Extension Service, Salinas

Mr. Cuelo, A.A.A. Chairman-Secretary - Monterey County

Mr. Peter A. Kantor, County Agricultural Commissioner, Monterey County

Mr. , Market News Service representative in Salinas

Mr. Cormie Storm, Field Supt., H. P. Garin Company

Mr. Hawley, Agri. Supt., Spiegl Company - (dehydrated cabbage and carrots)

Mr. L. L. Flockner, Manager, Calif. Artichoke & Vegetable Growers Corp.

Miss Dorothy Raiter, Manager, Raiter Cannery (spinach)

Mr. Layugan - labor boss and grower, D'arrigo Company, Castroville(broccoli)

Mr. Jensen, AAA Secretary, San Benito County

Mr. Picotti, Farm Placement Manager, Extension Service, Hollister

Mr. Morse Landrum, Manager, Ferry-Morse Seed Company Ranch, Hollister

Mr. John Jacobs, Farm Placement Manager, Extension Service, Gilroy

Mr. Frank Maratas, President, Filipino Labor Supply Assoc., Inc., Salinas

Mr. J. B. Sampayan, Secy., Filipino Labor Supply Assoc., Inc., Salinas

Mr. Eldon Dye, Farm Placement Manager, Extension Service, Watsonville

Mr. Charles Dick, Agri. Commissioner, Santa Cruz County, Watsonville

Mr. Henry Washburn, County Agent, Santa Cruz County, Santa Cruz

Mr. Garner, AAA Secretary, Santa Cruz County, Santa Cruz

DESCRIPTION OF HAND OPERATIONS

1. Hoeing Row Crops:

Most of the row crops require one or more hoeings during the growing period, unless the land is very clean of weeds. The machine cultivators are efficient in clearing weeds between the rows but leave those close to the plants and those in the row with the crop. The competition for moisture and soil feed from weeds lowers the yield and quality of a crop and makes harvesting difficult. Hoeing of row crops is generally done with a long-handled hoe. Care should be exercised in using the hoe so as not to cut off plants of the commercial crop and still get all the weeds. At times it may be necessary to bend over and remove weeds by pulling. Both hands should be used on the hoe and the weeds cut off just below the ground surface. Some crops, like onions, which are slow sprouting and slow in growing, may require hoeing when the plants are very small and hard to see. It may be necessary to use a short-handled hoe with one hand and use the other hand to pull weeds. Hoeing and thinning are often done in one operation. This is true with crops such as melons, cucumbers, squash, lettuce, and sugar beets. In thinning it is necessary to band down and thin each hill or group of plants to the required number by pulling out plants or cutting them. A sharp hoe makes the work easier and a better job accomplished. When you sharpen the hoe put the handle flat on the ground, place your knee on it, and push the file against the beveled cutting edge. Keep the bevel at the same angle and never file the other side of the blade except, possibly, in removing a rough edge.

2. Cutting Lettuce:

The cutter moves along the lettuce row in a stooped position with his knife and selects heads for cutting. By feeling the heads with the left hand, firm undamaged ones are selected for cutting. These generally have a lighter color than immature ones. Heads which are burnt, broken open, slimy, or otherwise damaged are left in the field. It is generally necessary to go over a field several times since all heads do not mature at the same time.

Heads selected for cutting are removed by holding them with the left hand and thrusting the knife held in the right hand against the root at a point just below the surface of the ground. The head is then tossed on a truck pulled alongside the cutters, placed in a crate pulled along by the worker, or placed in a row to be picked up later by another crew. Some fields use automatic loaders, with a low table on which a conveyor belt is moving, carrying the heads to the truck.

3. Harvesting Carrots:

Preparatory to pulling, sorting and grading, tieing and placing in field crates, the carrots are loosened in the soil by pulling a "lifter" along the row with a tractor. This cuts the tap root and loosens the root so it may be pulled.

The worker then pulls the carrots and generally places three rows in one row. He then comes back, if working individually, and sorts out the desirable carrots, discarding those diseased, misshapen, discolored, bruised, those showing growth cracks or sun burn, and the very small ones. The most desirable size is one and one-fourth to two inches in diameter at the crown. Old, dead leaves must be removed. Roots are selected for uniformity of size, shape, and smoothness and placed in a bunch, the number of carrots depending upon their size, and tied. A good deal of experience is necessary in tieing before a person is fast and efficient. The tied carrots are then placed in a field crate, placing three or four dozen bunches in a crate. The grading and bunching must be carefully done since the carrots must meet certain State and Federal standards of quality and size.

The carrots are then hauled into a central packing shed where they are washed and packed six dozen bunches per crate.

4. Blocking and Thinning Sugar Beets:

The sugar beet seed is known as a "multiple" or "seed ball" seed - in other words, several plants will sprout from the germination of the seed cluster as it is harvested. More and more, growers are using "sheared" seed, which is simply the seed cluster broken up into individual units, each of which will theoretically sprout a single plant.

Sugar beet seeds are planted with a drill, about 3 inches apart. If all or most of the seeds sprout, there will be a cluster of plants where each "multiple" seed has germinated, and these clusters may be about three inches apart. The problem is to thin these down to one vigorous plant about every 10 inches.

"Blocking" consists of chopping out the clusters to leave one group of plants each 10 inches to 12 inches apart depending on the distance between rows. Thinning consists of separating the plants within the group to leave a single, thrifty plant. Blocking ordinarily precedes thinning by a few days.

Blocking may be done with the long-handled hoe, requiring a limited amount of stooping. Thinning, however, is a more delicate operation. In order to separate out the most vigorous plant in

the cluster, and remove all the others, much hand pulling is necessary. Then, dirt must be scraped back around the crown of the plant which is selected and left to mature. Much of the work is done in a stooped position, or on the knees.

All weeds which are up at that time are generally hoed out in the thinning and blocking processes.

In view of labor shortages, growers will use sheared seed (seed balls separated into single seeds), planting it more nearly at the spacing desired for mature plants. Those using the multiple seed will do more blocking by mechanical means - a cultivator-like machine, the knives of which cut out the extra plants when the machine is pulled at rightangles to the rows. This is as efficient as hand-blocking and saves a lot of labor. There is no present substitute for hand thinning where multiple seed is used.

5. Harvesting Sugar Beets:

Sugar beets are a root crop. The beets average from 10 to 16 inches in length and from two to six inches or more in diameter. During the growing season, the tops are heavy and stand upright. When the beet matures, the tops wilt down somewhat. The beets are loosened in the ground by a tractor-drawn "lifter." The beet knife has a sharp, straight blade about 14 inches long, to which is attached a two-inch point at right angles to the blade and on the sharp side. The worker, making a downward swing with the knife, sticks the point into the upper part of the root and lifts the beet out of the ground. Grasping the root with the left hand and holding the beet away from the body after freeing the knife point, the worker slashes off the "crown" of the beet with the attached leaves, using a downward stroke of the blade of the knife. The topped root is tossed into the pick-up row, generally three or four rows being tossed together to clear space for the truck and to make it easier to pick up. The final operation is throwing the beets into the truck. Toppers generally work in crews and load the beets they have topped. Pay is by the ton, the scale varying with the yield per acre.

6. Harvesting Dry Onions:

Preparatory to hand-pulling of the onions, a tractor-drawn implement, a "lifter" with a blade is run under the onions. This cuts the roots and loosens the bulbs so they may be hand pulled. On small acreage, sandy soils, and where the onions are high out of the ground this operation may not be done.

In most districts the onions are allowed to mature and are not pulled until the tops have wilted down, although some of the early districts may pull them sooner.

The onions are generally hand-pulled, several rows being thrown into one, and allowed to cure. This curing time varies with weather, variety of onion, and maturity of the crop. In some of the very early sections the onions are pulled, the tops cut off one-half to one inch from the bulb, the roots trimmed and the bulb placed in a lug for shipment to the market.

After curing, the harvesters go down the row of piled onions and with a pair of sheep shears cut off the tops. Sometimes this can be done without the shears by twisting them. The onions are then hand-sorted and graded and put into 50 or 100 pound sacks. A slatted grading table is used in the process. All undesirable, bruised, or otherwise damaged onions are culled out.

7. Planting Celery:

Celery plants require about eight weeks' of growth in plant beds in the open or in flats in a lath house before transplanting to the field. The plant beds are irrigated before pulling the plants to facilitate the operation. The plants are then pulled and piled after which the roots and tops are trimmed. The trimmed plants are then placed in shallow pans with the roots submerged in water until planting. This may be four or five days later.

The field to be planted will be bedded and irrigated before transplanting. Two methods of planting are used in California, single-row and double-row plantings. In either case the plants are planted on the water line (the highest place reached by the water). In planting, the worker with his bundle or sack of plants moves along the row to be planted in a stooped position and pushes the plant into the soil with the index finger at the water line. Plants are spaced five to ten inches apart in the row depending upon the method of planting and the grower.

Usual Performance Dates of Major Operations for Specified Crops
Monterey County

Crop	Plant	Thin	Hoe or Weed	Harvest
Spring lettuce	Jan. 1-Feb. 28	Feb. 1-Apr. 30	Mar. 1-May 15	Apr. 15-June 15
Summer lettuce	Mar. 1-June 30	Apr. 15-July 31	May 1-July 31	June 15-Sept. 30
Fall lettuce	July 1-Sept. 15	Aug. 1-Oct. 15	Aug. 15-Oct. 31	Sept. 15-Dec. 15
Celery	July 1-Sept. 15			Nov. 1-Feb. 28
Sugar beets	Dec. 1-Feb. 28	Jan. 15-June 30	Mar. 15-June 15	Aug. 1-Dec. 15
Spring cabbage	Oct. 1-Feb. 15	Nov. 1-Feb. 28	Feb. 1-Mar. 15	Feb. 1-April 30
Fall cabbage	July 1-Sept. 15	Aug. 1-Sept. 30	Aug. 1-Sept. 30	Nov. 15-Mar. 15
Onions	Dec. 15-Mar. 15		Mch. 1-May 15	Sept. 15-Nov. 30
Artichokes	May 15-Aug. 15			Nov. 15-Mar. 15
Summer carrots	Feb. 15-Apr. 15		Mar. 1-July 31	July 15-Oct. 15
Fall carrots	Apr. 15-Aug. 15		June 1-Aug. 1	Sept. 15-Feb. 28
Broccoli	Aug. 1-Nov. 30	Oct. 1-Dec. 31	Nov. 1-Dec. 31	Jan. 1-Feb. 28
Tomatoes	Mar. 15-Apr. 3			Sept. 15-Nov. 15
Spinach				Dec. 1-Mar. 15
Garlic	Dec. 1-Jan. 31		Mar. 1-Apr. 15	Aug. 15-Nov. 15
Guayule	Oct. 15-Mar. 30		Mar. 15-June 15	Oct. 1-Dec. 31

Guayule in Monterey County

A. Guayule Acreage as of February 1944

1.	Planted in 1941, transplanted in 1942, approximately	2,200 acres
2.	Planted in 1942, transplanted in 1943, approximately	2,270 acres
3.	Planted in 1943, being " " 1944, approximately	3,600 acres
		8,070

B. Type of Worker: Week ending February 12, 1944

1.	American citizens living in Camp McCallum	390
2.	Mexican Nationals living in Camp McCallum	110
3.	Local labor - not housed	300
		800

C. Labor Utilization: Week ending February 19, 1944

1.	Nursery work, lifting, packing, etc.	250
2.	Field work, preparation of ground, planting, etc.	260
3.	Research and experiment work (continuous)	50
4.	B.P.I. experimental plots (continuous)	70
5.	Miscellaneous activity	70
6.	Factory labor - 10-43 to 3-44	100
		800

Year-round farm workers in Monterey County 1/

	Jan.	Mar.	May	July	Sept.	Nov.
Monterey	5,000	7,000	10,000	10,000	10,000	7,500
Unpaid family workers	1,700	2,000	2,000	2,000	2,000	1,800
Hired year-round workers	800	1,200	1,200	1,200	1,200	1,000
Hired temporary workers	2,500	3,800	6,800	6,800	6,800	4,700

1/ Preliminary estimates of California Extension Service.

Data Compiled by Farley Fruit Co.

on Yearly Employment of Agricultural Laborers

A. TRACTOR DRIVERS

1. Average yearly employment of 6 drivers for years 1941-42-43

a. 2700 hrs.
b. 3206 hrs. (drove truck portion of time)
c. 2700 hrs.
d. 2960 hrs.
e. 3045 hrs.
f. 3124 hrs.

Yearly Average Per Man
2956 Hrs.

B. IRRIGATORS - 1943 only

a.	2472 hrs.	-	Irrigating	
	565 hrs.	-	Other labor	
b.	2180 hrs.	-	Irrigating	
	158 hrs.	-	Other labor	
c.	2244 hrs.	-	Irrigating	
	626 hrs.	-	Other labor	Yearly average per man
d.	1948 hrs.	-	Irrigating	2782 hrs.
	1056 hrs.	-	Other labor	
e.	2108 hrs.	-	Irrigating	
	990 hrs.	-	Other labor	
f.	1556 hrs.	-	Irrigating	
	790 hrs.	-	Other labor	

C. STOOP LABORERS - 1943 only

a. 1924
b. 1914
c. 1965
d. 2024
e. 1988
f. 2322

12,137

Yearly average per man
2023 hrs.

Topping and Loading Rates for 1943 Sugar Beet Harvest

Tons per Acre	Rate per ton Govt. Min.	Govt. + 10%	Tons per Acre	Rate per ton Govt. Min.	Govt. + 10%
4.0	$ 3.110	$3.42	15.0	$1.500	$1.65
5.0	2.740	3.01	16.0	1.450	1.60
6.0	2.430	2.67	17.0	1.410	1.55
7.0	2.210	2.43	18.0 1/	1.380	1.52
8.0	2.050	2.26	19.0	1.350	1.49
9.0	1.930	2.12	20.0	1.340	1.47
10.0	1.830	2.01	21.0	1.330	1.46
11.0	1.740	1.91	22.0	1.320	1.45
12.0	1.670	1.84	23.0	1.310	1.44
13.0	1.610	1.77	24.0	1.300	1.43
14.0	1.550	1.71	25.0 or over	1.290	1.42

1/ Approximately the Monterey County average yield.

SUGAR BEETS - Topping and loading

In 1943 growers adhered very closely to the prevailing wage of government scale plus ten percent. However, there were indications that the scale was somewhat out of line for the lower yields. It was difficult to obtain experienced local crews on the fields having poor yields because they felt they could not make as much money. Most of this work was done by less experienced Mexican Nationals. The result was poor workers working on poor fields and good workers working on good fields, with a resulting disparity in their wages. Some of the Mexican Nationals topped sugar beets on an hourly basis of $0.65 per hour rather than do the work by piece-work.

Rates of topping and loading sugar beets 1/ by various yields per acre

(Comparison of performance between experienced and inexperienced workers)

Yield per Acre	1937 2/ Tons per Hour	Mexican Nat'ls, 1943 3/ Tons per Hour
10 tons	.444	.387
11 tons	.470	.340
12 tons	.493	.419
13 tons	.519	.448
14 tons	.540	.432
15 tons	.563	.436
16 tons	.588	.465
17 tons	.606	.480
18 tons	.625	.480
19 tons	.645	.552
20 tons	.666	.503

1/ Source: Agricultural Superintendent of Spreckles Sugar Company.
2/ Estimate: 85 percent experienced Filipinos and Mexican workers.
3/ In 1943 approximately 50 percent of topping and loading was done by the Nationals.

RESUME OF FARM LABOR SITUATION IN MONTEREY COUNTY 1/
August 1 through October 23, 1943
(Based on weekly reports by Farm Labor Office)

MAJOR SEASONAL CROPS - Harvest		WEEKS ENDING											
		8-7	8-14	8-21	8-28	9-4	9-11	9-18	9-25	10-2	10-9	10-16	10-23
Lettuce	No. working	1,200	1,200	1,200	1,100	1,100	1,200	1,200	1,400	1,300	1,300	1,000	1,000
	Shortage						-150	-250	-100	-50			
Carrots	No. working	1,000	1,000	900	800	800	700	700	950	950	950	950	950
	Shortage								-300	-200	-100	-100	-100
			(Hoe,weed)										
Beans	No. working	800	150	150			200	(delay)	75	200	300	400	400
	Shortage										-15		-35
Celery	No. working	350	350	350	250								
Strawberries	No. working	200	200	250	250								
Garlic	No. working	150	300	350	250	250	250						
Sugar beets	No. working		110	250	900	1,100	1,000	1,200	1,500	1,000	1,000	700	700
	Shortage										-75		
Onions	No. working			10	50	100	250	350	400	400	600	500	625
	Shortage						-100	-100	-250	-150	-150	-65	
Tomatoes	No. working						100	100	150	200	300	300	400
	Shortage								-50		-60	-70	-125
Total	No. working	3,700	3,310	3,460	3,600	3,350	3,700	3,550	4,475	4,050	4,450	3,850	4,075
	Shortage	0	0	0	0	0	-250	-350	-700	-400	-400	-235	-260
Estimated Total in All Farm Work		8,650	8,260	8,475	8,350	8,500	9,350	9,000	9,500	9,300	9,200	8,600	8,600
Estimated Available Farm Workers		519	320	263	213	159	77	90	70	100	80	85	85
Unfilled Job Openings		11	21	16	14	22	266	263	403	200	147	121	384
Placements by Farm Labor Office:													
Total		19	74	181	90	109	85	102	452	456	221	184	321
Regular farm workers		19	74	134	70	86	58	69	192	147	67	83	257
Volunteer workers		0	0	47	20	23	27	33	260	309	154	101	64
Percent Volunteer of total		0	0	26%	22%	21%	32%	32%	58%	68%	70%	55%	20%

1/ Issued October 27, 1943 by the Farm Labor Office of the California Extension Service.

Farm Labor Situation in Monterey County, 8/1---10/23/43, Continued
Narrative comments accompanying weekly reports:

Week ending	Comment
8-7	Most of the workers hoeing beans are Mexican Nationals who will be transferred to the sugar beet harvest.
8-14	Milkers are very scarce. (Unfilled openings for 7)
8-21	Year-round general farm jobs are hard to fill because the wages offered cannot meet those in other work. There has been some out-migration to the grape and other fruit areas, but this is not as great as expected.
8-28	Activity is increasing and labor is getting scarce. Inability to fill general farm jobs is due to the low wages and poor living conditions offered.
9-11	There is an increased demand for workers in lettuce, onions, and tomatoes. At the same time, workers are migrating out of the county to the grape, prune, and canning tomato areas. There is an expected shortage of sack sewers for the bean and onion harvests. The demand for skilled milkers continues.
9-18	Workers are needed to thin lettuce, hoe celery, transplant cabbage, broccoli, pick up potatoes, and harvest onions and strawberries. Approximately 1,000 could be used. Shortages are due to re-opening of schools and the movement of workers to other counties. In addition, Mexican Nationals have laid off part of the week to celebrate Mexican Independence Day. Filipino workers have also been laying off during the past week because their earnings are sufficient for their needs, and they do not want to earn enough to become subject to the income tax. The Police Department, Salinas, the County Sheriff's Office, the District Attorney, and various constables are conducting a drive to prevent loafing among agricultural workers. They are asking for the draft cards of loafers and are picking up others for vagrancy. Efforts made to secure soldiers from Fort Ord and the Salinas Air Base were unsuccessful because the men are being trained intensively preparatory to being shipped out. Volunteers are assisting in onions and carrots.
9-25	95 soldiers, 90 students, and 75 townspeople assisted in onions, carrots, and tomatoes this week.
10-2	A large number of volunteer workers are being used on weekends in carrots and onions. The staff of the Farm Labor Office is planning a thorough survey of acreages for more accurate determination of labor needs and length of time for various jobs.
10-16	To our knowledge no crops have been lost in Monterey County because of labor shortage; however, the need for labor at the present time is more acute than it has been all year.